This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the claims:

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1. (Currently Amended) An isolated polynucleotide that encodes a human ß1A_sodium channel subunit protein, said polynucleotide comprising a ~~member~~ sequence selected from a group consisting of:

(a) a polynucleotide ~~having at least a 75% identity to a polynucleotide~~ encoding ~~a polypeptide consisting of amino acids 1 to 268 of SEQ.ID.NO.~~ SEQ ID NO:14;

(b) a polynucleotide ~~having at least 75% identity to a polynucleotide~~ encoding a polypeptide ~~consisting of~~ comprising amino acids 150 to 268 of ~~SEQ.ID.NO.~~ SEQ ID NO:14~~;~~

~~(c) a polynucleotide which is complementary to the polynucleotide of (a) or (b); and~~

~~(d) a polynucleotide comprising at least 15 sequential bases of the polynucleotide of (a), (b), or (c)~~.

2. (Original) The polynucleotide of claim 1 wherein the polynucleotide is RNA.

3. (Original) The polynucleotide of claim 1 wherein the polynucleotide is DNA.

4. (Currently Amended) The polynucleotide of claim 1~~,~~ having a nucleotide sequence selected from ~~a~~ the group consisting of~~:~~ ~~(SEQ.ID.NO.~~ SEQ ID NO:12~~)~~ and ~~(SEQ.ID.NO.~~ SEQ ID NO:13~~)~~.

5. (Currently Amended) The polynucleotide of claim ~~4~~1 ~~further~~ having a nucleotide sequence selected from the group consisting of allelic variants~~, mutants, and functional derivatives~~ of ~~(SEQ.ID.NO.~~ SEQ ID NO:12~~)~~ and ~~(SEQ.ID.NO.~~ SEQ ID NO:13~~)~~.

6. (Currently Amended) The polynucleotide of claim 1, wherein said ~~DNA molecule~~ polynucleotide is genomic DNA.

7. (Currently Amended) An expression vector for expression of a human ß1A sodium channel subunit protein in a recombinant host, wherein said vector contains a recombinant ~~gene~~ polynucleotide encoding ~~a human ß1A sodium channel subunit protein and functional derivatives thereof~~ SEQ ID NO:14.

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8. (Currently Amended) The expression vector of claim 7, wherein the expression vector contains a ~~cloned gene~~ polynucleotide encoding a ~~Human~~ human ß1A sodium channel subunit protein~~,~~ and having a nucleotide sequence selected from ~~a~~ the group consisting of~~: (SEQ.ID.NO.~~ SEQ ID NO:12~~)~~, SEQ ID NO:13, allelic variants of SEQ ID NOs:12 or 13, and ~~(SEQ.ID.NO.:13)~~ functional derivatives of SEQ ID NOs:12 or 13.

9. (Currently Amended) The expression vector of claim 8, wherein the ~~group further consists of allelic variants, mutants, and functional derivatives of~~ nucleotide sequence is ~~SEQ.ID.NO.~~SEQ ID NO:12 ~~and~~ or ~~SEQ.ID.NO.~~SEQ ID NO:13.

10. (Currently Amended) The expression vector of claim 7, wherein the expression vector contains genomic DNA encoding a ~~Human~~ human ß1A sodium channel subunit protein of SEQ ID NO:14.

11. (Currently Amended) A ~~recombinant~~ host cell containing a ~~recombinantly cloned gene~~ recombinant polynucleotide encoding a ~~Human~~ human ß1A sodium channel subunit protein of SEQ ID NO:14 or a functional derivative thereof.

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12. (Currently Amended) The ~~recombinant~~ host cell of claim 11, wherein said ~~gene~~ polynucleotide has a nucleotide sequence selected from ~~a~~ the group consisting of~~: (SEQ.ID.NO.:12),~~SEQ ID NO:12, ~~(SEQ.ID.NO.:13),~~ and SEQ ID NO:13~~functional derivatives thereof~~.

13. (Currently Amended) The ~~recombinant~~ host cell of claim 11, wherein said ~~cloned gene~~ polynucleotide is genomic DNA.

14-16 Withdrawn

17. (Currently Amended) A process for ~~expression of~~ expressing a ~~Human~~ human ß1A sodium channel subunit protein in a ~~recombinant~~ host cell, comprising:

(a) introducing an expression vector encoding a human ß1A sodium channel subunit protein, into a cell, wherein the vector ~~comprising~~ comprises a nucleic acid sequence capable of hybridizing ~~under stringent hybridization conditions~~ to a nucleotide sequence~~, or its complementary sequence,~~ having the sequence of SEQ ID NO:12 or SEQ ID NO:13, or its complementary sequence, wherein the hybridization conditions comprise incubation in 50% formamide, 6X SSC, 1% SDS at 42 C for 12-19

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hours, washing in at least two successive washes at 22 C, followed by stringent washes at 65 C in a buffer of 0.04M sodium phosphate, pH 7.2, 1% SDS and 1mM EDTA;

(b) culturing the cell of step (a) under conditions which allow expression of a protein encoded by the ~~nucleotide seuqence~~ expression vector.

18-35 (Withdrawn)